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I.

HAY ASTHMA.

Observations on the Nature, Cause and Treatment of Hay Asthma.

By WILLIAM GORDON, Surgeon, Member of the Royal College of Surgeons, Edinburgh, &c. &c. &c.

THE variety of asthma which forms the subject of the present memoir, has scarcely, if at all, been glanced at by any systematic writer on the practice of medicine. We are furnished with various instances of dyspnœa, and other pulmonary affections, being produced by the inhalation of the effluvia arising from certain odoriferous and other substances, examples of which I myself have witnessed ; but the catarrhal and asthmatic symptoms, occurring in particular individuals during the ripening of grass, and evidently caused by the smell given off from its flowers, have been but slightly noticed ; and by some practitioners their existence is considered very questionable, if it be not altogether denied. There can be no doubt, however, that the complaint which is termed (though perhaps not very correctly) "hay asthma," does really exist ; and although occasionally mild in its nature, yet for the most part it assumes a very formidable character, as will appear from the following history of it, which is taken from some well-marked cases that have fallen under my observation.

The disease first commences with a slight sensation of chilliness, accompanied with thirst, lassitude, drowsiness, and other indications of fever; at the same time the Schneidonian membrane becomes dry and irritable, and the patient is affected with an almost incessant sneezing, and an inexpressible itching or pricking in the fauces and trachea, and along the external auditory passage : the head is occasionally vertiginous or painful, but more generally it feels heavy or indescribably uncomfortable. These symptoms are soon succeeded by inflammation of the tunica conjunctiva, which comes on very suddenly, and after remaining for an uncertain length of time, vanishes as suddenly as it made its appearance.

After the lapse of two or three days, though sometimes much earlier, a tightness is felt about the chest, and the respiration begins to be obstructed, especially in the evenings, and is then always attended with a wheezing noise. This obstruction at first is but very trifling, and occasions little or no inconvenience ; but it daily becomes more and more oppressive, and at length arrives at the very acme of severity. At this crisis a dreadful sense of suffocation comes on, together with an intolerable weight at the lower part of the sternum, and a deep, hard, dry, frequent cough, which tends very much to aggravate the difficulty of breath-

ing. The condition of the patient is now most distressing,—he cannot for a moment remain in the horizontal position; he gasps for breath; his eyes protrude; his face and lips are of a deep purple color; he throws open the doors and windows; rushes from one room to another in quest of a refreshing current of air; but, unable to find relief, he sinks down exhausted or half insensible. From this state he is roused by stimulants, or he gradually recovers by himself; but probably only to undergo a repetition of his sufferings. These symptoms, which usually make their attack about seven in the evening, but not unfrequently long before this period, continue five or six hours; they then begin to subside, and as the morning approaches, the patient falls into a short but restless slumber, from which he awakes with a sense of great debility, and a feeling of constriction across the chest.

Although there commonly takes place towards morning a considerable remission of the asthmatic fit, yet the symptoms never quite go off, but remain throughout the night and following day, and in the evening assume their accustomed severity. During the paroxysms the pulse is weak and irregular, and ranges between 85 and 100; the tongue is white, and the urine is high-colored, and discharged in small quantities.

The paroxysms do not always present themselves in so violent a form as I have now described; the patient sometimes experiences nothing of that overwhelming dread of suffocation which I have mentioned above, and in some instances the attack is so remarkably mild, that he is affected with only sneezing, headache, and inflammation of the conjunctive and Schneiderian membranes.

The cough is never attended with any expectoration, and very often it does not come on till the other symptoms have in a great measure abated. In the latter case it is never so frequent nor distressing as when it appears in the earlier stages of the disease.

Hay asthma seems to be peculiar to youth and middle age, and is never observed in the later periods of life.

Many examples, as I before intimated, have been recorded of great distress and disorder of the respiratory organs being occasioned by the odor exhaled from aromatic or pungent bodies; and there can be no doubt that the cause of the singular complaint which I have endeavored to describe, is the aroma emitted from the flowers of grass, particularly from those of the *anthoxanthum odoratum*, or sweet-scented vernal grass. If the patient remain closely shut up in a house, even although this be situated in the midst of the richest grass, he suffers considerably less than if he walk abroad into the fields; and if he remove from the country to the centre of a large town, or go out to sea, he is never at all affected; but the moment he comes into, or approaches a meadow, he immediately begins to sneeze, and returns home with inflamed eyes, wheezing, and difficult respiration. I have known a patient wander about his flower garden for several hours, or ride through corn fields or plantations, and yet not experience one disagreeable sensation; but as soon as he arrived at the vicinity of a meadow, the sneezing and ophthalmia have instantly appeared. I have said that the *anthoxanthum odoratum* seemed to be the principal exciting cause of hay asthma, and I am induced to come to this conclusion—first, because

this plant is one of the most strong scented of the grasses ; and, secondly, because as soon as it begins to flower, and *not till then*, the asthma commences ; as the flowers arrive at perfection, the disease increases ; and after they have died away, I have remarked that patients could pass through the most luxuriant meadow with total impunity. The disease then should rather be denominated grass asthma than hay asthma, since hay seems incapable of producing it. This asthma appears, from the scanty excretion of mucus from the lungs which attends it, to consist chiefly in a spasmotic constriction of the bronchial vessels, and of the muscles concerned in respiration.

It will be evident, that residing in a large town, or a voyage at sea, during the season in which the flowers of grass, and especially of the anthoxanthum odoratum, are in bloom, and in a state of their greatest vigor, will prevent the accession of hay asthma. But these remedies are not always convenient, nor feasible. It therefore becomes necessary to invent some other means of administering relief, and such as may be at the command of every one. I shall, therefore, give an account of what measures I have adopted, and have found most successful, not only in mitigating or removing the paroxysms when present, but in warding off their attack altogether.

[The Treatment, in our next.]

II.

ON A DISEASE OF THE TYMPANUM.

BY JOSEPH SWAN, Esq.

IN tracing the tympanine branch of the glosso-pharyngeus nerve, which has been so particularly de-

scribed by Jacobson, much of its distribution may be seen on the transparent membrane lining the tympanum when this part is perfectly sound, but when it is diseased a very considerable difficulty is experienced. In an attempt to trace this nerve in the head of an old woman, the membrane lining the tympanum was not only thickened, but there was at the same time some roughness of the bone. In the head of a man, who had a suppurating node on the forehead, and whose posterior nostrils were stopped up by adhesions of the soft palate, this membrane was also thickened ; the sphenopalatine ganglion was very considerably enlarged. In the dissection of the head of a very young woman the schneiderian membrane, covering the inferior turbinated bone of the left nostril, adhered very considerably to that of the septum, so that a very little passage was left for the air ; there was a perforation in the membrana tympani of the same side, and purulent matter was contained in each tympanum. The membrane lining the tympanum was so much thickened that the nerves could not be observed.

I believe deafness does not so often depend on a disease of the portio mollis as has been supposed, but much more frequently on an inflammatory action attacking the membrane lining the tympanum, and involving these small branches of the tympanine nerve. There are very few deaf people who cannot hear music or singing, or who cannot hear conversation, whilst they are in a carriage in motion. But it is not so with those who are nearly blind, for when the optic nerve is paralysed, no light, nor any modification of it

can produce perfect sight, and it must be the same with the auditory nerves with respect to sound. I will not deny that a very strong light may enable a person who has a slight degree of vision to see some objects almost in the same manner as a very deaf person hears with a speaking trumpet. I believe, therefore, that deafness depends very frequently on the inflammatory action having impaired these minute branches of the glosso-pharyngeus nerve, which are distributed on the tympanum; and although many of the noises may depend on the disordered functions of the portio mollis, I nevertheless think they may arise, too, from these small branches of the glosso-pharyngeus, and their communication with the grand sympathetic in the carotic canal. It may be asked how music, &c. dispose the ear for receiving the fainter sounds, as those of the voice. I conceive these excite the parts about the tympanum in the same way that stimulating things would any other organ; and that by this excitement such a degree of action is imparted to the whole as is present in a healthy state of the organ. When the functions of the gustatory nerves are impaired, people cannot taste properly; but when these have been stimulated with a little wine, the taste again becomes exquisite. This may not be thought a fair argument; but I conceive the wine becomes a local stimulus, although it may, at the same time, be a general one, and by both means effect the same purpose.

The consideration of the distribution of the tympanine branch of the glosso-pharyngeus, leads to the conclusion that the tympanum performs more important functions in

the production of hearing than have been usually ascribed to it; and that the failure of remedies in cases of deafness, which have been termed nervous, may have proceeded very much not only from the obscure situation of the tympanum, but from the misapplication of the remedies themselves. And I conceive, therefore, as a thickening of the membrane lining the tympanum, and involving such delicate nerves, can be so often observed, that many of the diseases of the ear may be more within the reach of art than has been contemplated; and that by subduing the inflammatory action at its very onset, before the structure of the delicate parts has become so much changed as permanently to impair their functions, many of the worst cases might be prevented.

Medical Gazette.

III.

LIVING MONSTERS.

Observations on a Human Monster belonging to a new Genus.

M. GEOFFROY ST. HILAIRE, in May 1829, read to the French Academy of Sciences a memoir on a new production of the human species, struck with monstrosity in the fourth month of intra-uterine life, and on the occurrence of circumstances which produced the monstrosity, by disturbing a formation, which until that period was regular. On the 26th April last, was born, in the Rue du Faux-bourg St. Martin, of a woman aged 24 years, who had no children previously, a child of regular period, and of large size. On measuring it, from the projection of its eyes, its length was found to

be twenty inches. The upper region of the cranium was wanting. The woman had been attended by Madame Fremaux, midwife, and Dr. Brion, both residing in the same street. The latter has drawn up a notice, in which he has described the defects of the conformation which the child presented. M. St. Hilaire remarked, that it is to him, therefore, that the observation in question belongs. At a meeting of anatomists called by Dr. Brion, one of the medical men present made the most singular assertions as to the causes of the monstrosity. "The monster has large eyes," said he, "which is because the mother had her view constantly fixed on large eyes which she singularly loved. It has long and pointed ears, because the imprudent mother had her caressing hands continually upon the long ears of her dog." M. Geoffroy St. Hilaire mentioned this fact for the purpose of ridiculing the explanations which some medical men still give of cases of monstrosity. After enumerating the different kinds to which the monster in question may be referred, he showed that it comes nearest to the *Thlipsencephali*. Now, in this monstrosity, the fetus going on in a regular manner until about the fourth month, only deviates at a later period, and under the influence of some violent cause, from the normal organization. Confiding in his previous researches, he did not hesitate to declare, that the mother of the new and very singular *thlipsencephalus* which was before him, had been rudely struck about the third or fourth month of gestation, and even added that it was probably by a violent kick. This explana-

tion was utterly rejected by the medical man who had proposed the singular one mentioned above. On questioning the woman, it was in fact discovered, that, at the period of four months' gestation, she had actually been struck and severely wounded by a violent kick, which hit upon the right side of the uterine region. Dr. Brion's inquiries led him to the following results:—

Conception took place on the 19th June, 1828; lesion produced by wound, 17th November, 1828; birth accomplished on the 26th April, 1829; total duration of gestation, 282 days.

Until the period when she was struck, that is to say, during the first four months of gestation (112 days), the mother enjoyed excellent health; but from the 17th November to the period of delivery (during the next five months) she did not cease to experience in the lower abdomen, and in the whole pelvic region, pains more or less acute, which she attributed to the brutality of which she was the victim. It was also a kick on the lower belly which had produced the organic deviations of the second species of *thlipsencephalus* observed by M. Geoffroy; but this species, as well as the first, presented smaller dimensions, the individuals to which they belong having been only sixteen inches in length. On examining with more attention, and with the aid of dissection, the new *thlipsencephalus* which was submitted to him, he found that it differed from the first two by characters so important, that he was led to consider it as a new genus, to which he gives the name of *Nosocephalus*. Like the *thlipsencephalus*, it is the natural and al-

most necessary result of a violence exerted upon the organ which contains the product of conception, only at a more advanced period than that at which the deviation would lead to the production of a *thlipsencephalus*. The author concluded with some considerations respecting the theory of monsters. Recurring to the observation which formed the subject of his memoir, he remarked, that the manner in which it was possible to guess, from the inspection of a monstrous production, the cause to which the monstrosity should be referred, and the differences of deviation observed in the *nosocephalus*, which accord so well with the more advanced period at which the perturbing accident took place, leave no doubt respecting the theory of the formation of these kinds of monsters; so that at least, in well defined cases, science possesses facts which may be considered as attaching themselves to principles sufficiently demonstrated to be capable of being applied to use in the practice of medicine. The theory is so perfect in this respect, that, on the inspection of certain monstrosities, it is possible to assign the month, the week, and almost the day, on which the perturbing accident has interrupted the regular order.

Jameson's Journal.

A Double-headed Female.

A late London journal gives a description, accompanied with an engraving, of a female infant, now living in the town of Sassari, in Sardinia, of the age of five months, having two heads and four arms, or the upper part of two well formed bodies united at the breast. The rest of the body with the legs

are of ordinary form and proportions. The child is thin but in all respects well. One head sleeps while the other is awake, one is nourished by the mother and the other by the nurse, and they are nursed alternately. One head sometimes cries while the other is quiet. The left head is somewhat larger than the other.

American Traveller.

Connected Sisters.

In the following letter we have to record another instance of monstrosity. The appearance among us of the Siamese boys has called attention to this subject throughout the country, and will be the means probably of bringing before the profession many similar cases which have never yet been known beyond the town or neighborhood in which they have occurred.

Madison Barracks, Sacket's Harbor, N.Y., Sept. 9, 1829.

SIR,—As the arrival of the Siamese youths has excited much interest in your city, and among medical men generally, I take the liberty of reporting a similar case, and one that came under my own inspection.—I attended a lady who was delivered of twin female children between the eighth and ninth month of gestation; and without giving the details of the delivery, I will only observe that their probable weight was about twelve pounds,—that they were firmly united from the clavicles to the last false ribs, having apparently one sternum common to both, and one umbilical cord entering at the point of union below. There was a perfect development of every external part, and they were living five minutes before delivery.

If you think this case of any importance, you are at liberty to make such use of it as you please.

Respectfully,

SAM'L G. J. DECAMP,
Assistant Surgeon, U. S. A.

BOSTON, TUESDAY, SEPT. 29, 1829.

DR. GODMAN'S ADDRESSES.

DR. JOHN GODMAN, of Philadelphia, has lately published a series of occasional addresses possessing greater variety in their subjects, and exhibiting more spirit in the manner of treating them, than could have been expected from the nature of the occasions which called them forth. The subjects of these essays are as follows:—1. Monitions to Students of Medicine. 2. Anatomy taught by Analysis. 3. Professional Reputation. 4. Dissection. 5. The study of General Anatomy. 6. Natural History. 7. Design. 8. The Mechanism of the Human Body. 9. A valedictory Address to Students. With an Appendix on Tight Lacing.

The first, third, and last of the addresses, contain excellent advice to medical men about to commence their course of study. Dr. G. is disposed to place the standard of medical character sufficiently high to be worth the ambition of the most gifted members of the community. The physician must not only acquaint himself with every branch of his profession, but he must keep pace with the learning, the intelligence and the spirit of the times; he must qualify himself to meet on fair if not equal ground, men of finished education in other professions and

pursuits; he must also be prepared to instruct the ignorant, to decide the wavering, and to give aid and counsel in the various embarrassments and difficulties which his friends may meet. Above all he must, in his professional course, act from cool deliberate judgment. He is not to commence a mere routine, and follow on, regardless of new facts, and unconscious of the improvements which are taking place in his science. Dr. G. observes, with great truth and force of expression, that the physician has no right to content himself with doing as well as he can. His duty is to learn to do absolutely well; and it is a shameful apology, when the health or life of a patient has been sacrificed through his ignorance, that he acted to the best of his ability. He is answerable for his ignorance as well as his neglect; not indeed to others, because they cannot judge how far his acquisitions have been limited by his capacity; but to himself and his own conscience he is answerable, if he has let the opportunities and means of acquiring knowledge pass unimproved, and has in consequence found himself unequal to the duties which he undertakes to execute.

Anatomy taught by Analysis.

Under this title, Dr. G. considers the advantage of dissection being performed in the lecture-room in the presence of students, rather than exhibiting to them a subject in which the parts have previously been separated for demonstration. He thinks the amount of information imparted and the clearness of the notions in-

culated, to be infinitely greater in the former mode. The student sees the parts in their natural positions, as they are presented by the removal of successive layers, as it were, of integument, and while he acquires the science of Anatomy, receives also a practical lesson to guide him in making his own researches.

There is much truth in this reasoning, and the mode of lecturing alluded to is, to a certain extent, undoubtedly the best. Few lecturers however on anatomy devote sufficient time to their course to perform all the dissections required in presence of their classes; nor would a lecture thus conducted have sufficient animation and interest for the majority of students. The truth is, that it is impossible for young men to learn anatomy in a lecture-room, however excellent the demonstrations which may be given. To acquire any knowledge of this science, they must dissect for themselves. It is true that they will commence doing so more neatly and adroitly, if they have once or twice witnessed the movements of a skilful dissector;—but for the anatomist to go through the whole dissection of a subject in order to teach his pupil how to use his knife, would be as absurd as for a novitiate in *Masonic* mysteries to watch the erection of a complete edifice, that he might learn how to place one brick accurately upon another. Some dissection in a lecture-room is inevitable; because successive portions of a demonstration may require states of the parts absolutely incompatible with each other; and therefore their relations may require

to be altered during the delivery of the lecture. This contingency provided for, the subject may be very properly prepared for demonstration beforehand; the parts carefully separated, and then replaced so as to be called up in their natural order by the lecturer. The whole is shown, the parts also are exhibited, and the problem proposed to the student is, to take another whole precisely similar in its construction, and separate that whole into similar parts. That anatomy ought to be taught by analysis is certainly true; we apprehend no man in his senses would think of teaching it by synthesis; and provided the true method of teaching be adopted, we regard the greater or less use of the knife in the lecture-room as a point of minor importance.

Study of General Anatomy.

In the fifth essay, Dr. Godman vindicates the importance of an accurate acquaintance with anatomy to the medical practitioner; and deprecates with great earnestness the existence of those prejudices, among all orders of society, which oppose the greatest obstacle to its successful cultivation. He declaims vehemently against the hostility exercised against dissection, and the opposition of friends to post-mortem examinations. Such prejudices he maintains ought long since to have been exploded, along with the superstitions of the dark ages, of which they make part. Their continuance at the present day is a disgrace to the age; a foul blot on the character of a Christian people, who, professing to believe the immortality and immateriality of

the soul, yet regard with such degrading attachment the frail tenement of clay, which its vital inmate has quitted forever.

We confess ourselves not without apprehensions that the eloquence lavished on this topic by medical writers here and abroad, has been most unprofitably spent. We may call it ignorance, prejudice or materialism, as we please, but it is certain that there is something revolting to the human mind in the idea of mutilating the remains of one, who but a few days since was living and breathing like ourselves; and that it is much more according to our notions of respect to our deceased friends to deposit their bodies in the earth, than to consign them to the knife of the anatomist. Nor can this repugnance be regarded as one of the errors of our education. The sentiment has existed in all ages, and in every degree of civilization. The bodies of deceased friends, whether buried, burned or embalmed, have been universally held sacred and inviolable. To the professed anatomist, in whom habit has produced familiarity with his occupation, there may seem to be nothing more unpleasant in prying into the structure of a corpse than in examining that of a watch, or any other piece of mere human mechanism. But these notions are not so easily received by the generality of mankind. By the majority, the idea of dissection, and even of examination, is viewed with horror; and the proceedings of the dissecting-room, whether seen or described, are regarded as an utter abomination. It is true that from considerations of respect

to a physician, or from the more patriotic desire of promoting public welfare, examinations are permitted. This is obviously a sacrifice of feeling to duty; and even the strongest sense of obligation frequently fails in reconciling the mind to what is still held as a sort of sacrilege. Who then are they that are to go farther, and to give up the dead to the knife of the anatomist? Not the rich surely; this is scarce even pretended to be hoped for. We may safely add, not the poor; for the price is too much, at which even the poorest will barter away the objects of their respect and affection. Of all these things we should be fully apprised.

But let us remember, and urge the consideration on others, that there are those who die *without friends*; and it is on the circumstance that individuals die in public institutions whose remains are allowed to be interred without the attendance of a solitary mourner, that anatomists, both here and abroad, have founded a strong claim to legislative enactment in behalf of their science. It is needless to say how strong is the appeal which they have made, on this ground, to the good sense and good feeling of assemblies composed of those entrusted, as the wisest and the best, with the solemn duty of making laws for the human race. The answer which may be expected to such appeal, in the present state of public sentiment, may be learned from the history of the late bill introduced into the British Parliament. They manage things better in France, it is true; but whether they are to be managed any better in this country,

must depend entirely on the profession itself. If every individual member of the faculty will exert his influence in his own private circle, then may we hope for such a change as will enable us to heal the sick, and the public to feel secure against the ravages of the resurrectionist.

In the address on the study of General Anatomy, Dr. G. reviews the discoveries of Bichat and the doctrines of Broussais, which he thinks have united to introduce juster views in regard to the nature of diseases, and more judicious modes of treatment, than had before been possessed by medical practitioners. Too much honor certainly cannot be paid to the name of Bichat. His labors prove a union of genius and industry such as fall only to the lot of the favored few, destined to mark and ennoble the character of the age in which they live; and the philosophical mode of investigating morbid changes which his works have so much contributed to promote, has produced almost a new era in medical science. Whether Broussais is entitled to equal distinction among the benefactors of mankind, may be better decided when his peculiar views have been more fully submitted to the test of experience.

Natural History.

In discoursing on Natural History, Dr. G. traces the various forms of life, as it is exhibited in various degrees of perfection, from the amorphous vegetable, scarcely to be distinguished from the rocky bed to which it is attached, through the different orders of animals up to man.

He remarks on the singular fact, that some vegetables evince a sensibility and irritability independent of those which serve to maintain their vitality and growth. Instances of this are found in the sensitive plant, and likewise in the *Dionea muscipula*, or *Venus' fly-trap*, which grows in some of the southern states. The latter plant is said to possess the singular property of folding its leaves, when a fly lights upon them, so as to detain or crush the aggressor. The author conceives this to be a strong argument that these plants actually *feel*, in the common sense of the term, though he is not ready to admit that they exercise volition. We are unwilling to allow that the two properties are separate in the instances alluded to, nor do we see the necessity of admitting the existence of either. If the plant moves because it feels a touch, it seems unreasonable to deny it the intervention of a will. Again, it appears very improbable that a sensibility to, and the wish and power to avoid injury, should be limited in its operation to a single noxious agent, and that of the slightest description. Sensibility and motion in animals are always commensurate, and they constitute their security against danger and injury. In this instance, on the contrary, the sensibility would appear to be peculiarly exquisite, and the means of resistance or escape almost nothing. We should be disposed to regard the phenomenon, in both these productions, as depending on a principle of *irritability* distinct from sensibility. In speaking of the nervous constitution of animals, our author follows

the classification of Bichat, and considers it divisible into two systems,— those of organic and of animal life. He appears however to have somewhat deviated from the path laid out by his illustrious guide, and the distinction between the two systems, as made by him, wants much of the clearness which it possessed as laid down by the author of the General Anatomy. A single quotation, and a short one, will serve to illustrate our meaning.—“The nervous system of organic life is found in all those animals which, though destitute of brain, are capable of performing some of the curious actions which, studied by themselves, would imply the highest efforts of reason and forethought, did we not know that such actions are performed without reference to reason, and are entirely independent of all influence of education. Such are the actions of the bee in constructing the cells of her comb, of the wasp in gathering the materials for the construction of its nest, and in procuring food for its young.” If by this extract is understood, as the words obviously seem to imply, that the bee and the wasp are destitute of animal nervous organization, the assertion is wholly at variance with the views of Bichat; since, according to this author, all action and motion which are voluntary on the part of the animal, take place in virtue of such organization. The organic system, properly so called, serves merely for the preservation of the animal itself, and has no more to do with the movements of the bee in constructing her cell, than with those of the man in building his ha-

bitation. We notice this instance of inaccuracy as one of a very small number in the work. The author himself remarks that most of those who condemn the system of Bichat, show that they either have not read his works, or have mistaken his meaning. We regret that he should have led us to advert to the fact that some of his admirers have laid themselves open to a similar accusation.

The distinction intended to be set up, however, between the superior and inferior orders of animals, is one of no small moment, since it establishes a boundary between reason and instinct; attributing the former to the superior tribes, and limiting the inferior to the possession of the latter. Whether our author has taken too bold a step in admitting any portion of the brute creation to a share of this much contested prerogative, we know not; but we do not well see how he could have done otherwise, in view of those facts which the study of Natural History presents to every candid observer. Speech and reason, it is said, are the characteristics of man. But what is reason? We venture to maintain that no definition can be given of this faculty which will include the human race and exclude the animal. Is it the province of reason to propose to itself an end, and to devise means suitable for the attainment of that end? The dog, whose master has met with an accident which disables him from proceeding on his journey, sets off at once in pursuit of assistance; attracts if possible the notice of some passenger; urges him by every mode of entreaty to turn and follow; and guides

him quickly to the scene of suffering. The bee, whose waxen structure has been injured, repairs the damage inflicted with the greatest despatch and the most consummate skill. The elephant, whom some unthinking visiter has been wanton enough to provoke, makes no show of unavailing rage, but marks out the aggressor, knows him again at the end of weeks or months, even among a hundred others, and generally contrives, by some unexpected mode of retaliation, to make him pay a severe penalty for his malice or folly. If then forethought and contrivance constitute reason, we see not how we can deny its possession, in a considerable degree, to the more favored of the animal creation.

But it is said that animals are not susceptible of being improved by education. So far as this relates to successive generations, the assertion cannot and need not be answered. It is evidently not intended by nature, that the habits and mode of living of the inferior animals should be materially altered in this manner. Yet the domesticated animals transmit their acquired pacific habits to their offspring, and thus produce a sort of hereditary improvement. A more curious fact is, that pointers which have been properly trained, communicate to their young, in an increased degree, the faculty of acquiring the habit which renders them valuable to their possessor. In a more limited sense, all animals are improved by education. The powers of song and of flight, acquired by the young bird from its parent, are a proof of this, no less than the artificial en-

dowments conferred on learned pigs, dogs, &c., by human instructors. This capacity for receiving instruction is confined confessedly within narrow limits; nor is it sufficient to say that these are formed solely by the want of oral communication; for the deaf and dumb, among human beings, learn much farther and faster than animals: it is limited by the constitution of nature; but still its existence cannot be denied; and this is quite as much as is necessary to the point in question.

It is perhaps proper to advert to one view of this subject, in which it assumes apparently a higher importance than is at all due to it as a mere speculative discussion. It may be said that, in admitting the affirmative of this question, we necessarily allow that the inferior animals have souls,—and thus involve ourselves in the dilemma of denying that the soul is immortal, or of admitting that these, our humble companions on earth, are to share with us the enjoyments of another state of existence. We do not regard either alternative with any excessive alarm. We have better security for a future life than can arise from any speculative distinction between discerpible and indiscerpible, between matter and spirit; and if the annihilation of soul is every way possible in itself, it is still impossible for those who have the promise of immortality. Neither has the creed of the poor savage, that “admitted to an equal sky, his faithful dog shall bear him company,” the power to inspire us with any terror, though the notion is too vague and visionary for serious discussion.

On the other hand, is there nothing to dread in admitting an instinct arising out of organization merely? If something so near reason can result from a mere skilful arrangement of parts, it is by no means extravagant to infer that reason itself is the product of a still nicer construction. To admit this, were to countenance materialism in its grossest form. Met on both sides by difficulties so serious, we seem compelled to adopt in our conclusions a middling course. Some share of the reasoning faculty may safely be conceded to the inferior animals without material injury to our own prerogative; and at all events it is better to raise them toward our own rank in the scale of being, than by vilifying those faculties which we possess in common, to involve ourselves and them in a common degradation.

Design.

In his address to the academy of Design, our author makes some very judicious remarks on the anatomical knowledge required by the artist, in distinction from that which is needed by the physician and surgeon. The models of Grecian sculpture, in which every part of the form is so perfectly developed, receive from him a just tribute of admiration. It is obvious, that in order to produce symmetry in a living body, it is necessary to have given to each muscle its due proportion of exercise. Hence the difficulty of finding, in an artificial state of society, a perfectly proportioned figure. Artisans, according to their various occupations, exercise particular sets of muscles; and thus

in each class of these persons, one portion of the frame will appear to be developed out of proportion to another. The want of due muscular development is still more obvious, though for a different reason, in the studious and sedentary class. On the other hand, the savage himself is led, from habit or necessity, to adopt peculiar movements in preference to others, so that his gait becomes awkward and his form impaired. The best forms among savage tribes are, according to our author, those of the Osage Indians, and others similarly situated. As their principal exercise is horsemanship, they are free from the defects observable in other Indians; their frames are remarkably well proportioned, and their movements almost uniformly graceful.

Mechanism of the Human Body.

The eighth essay, according to its title, treats of the mechanism of the human body. This subject is a novel one, and when pursued further than it appears to have been as yet, will be extremely interesting.

The remarks on Tight Lacing, which conclude the volume, contain an eloquent and forcible appeal to the ladies on their indulgence in so pernicious a practice. As these remarks have already appeared in our pages, it would be superfluous to say that we admit their correctness, and approve of the spirit in which they are written. With regard to the good which is to be done by writing on this subject, we are not very sanguine in our hopes. Fashionable follies are not easily put down by

direct attacks, either from the pulpit or the press. Something may be done by rendering a custom ridiculous, but very little is to be effected by gravely proving it to be wrong. The Doctor's anecdote about the servant-maid and the tea-kettle is, for domestic use, fairly worth the whole of his argument and his invective together. If those who decry tight lacing really expect to make converts among the fair victims of this injurious practice, they need do no more, in order to be undeceived, than to attempt enforcing their doctrines on their own wives and daughters. Reform, like charity, may well begin at home; and if the reformer fails there, he will be the less disappointed by ill success abroad. The truth probably is, for we will not be positive on this point, that the existing rules in regard to dress do not require lacing to be carried to that degree in which it is attended with injury or danger; and to deny that in a moderate degree it improves the figure, would imply, in respect of taste, something little short of total depravity. Those who, from excessive vanity or a worse motive, choose to straiten their persons to one half the natural dimensions, deserve the ill consequences of their folly and wickedness; but to hold a custom answerable for all the evils of its abuse, seems scarcely conformable to reason and to justice.

It is needless, perhaps, after this analysis of Dr. G.'s work, to add that it will not diminish the high reputation which the author has already acquired for his labors in Natural History and Physiology. The volume is replete with excellent philo-

sophy, pure morality, and an evident zeal for the promotion of science; and the sentiments are conveyed in a style which, if sometimes too ambitious for the subject, is always animated, and generally elegant. The title, after all, scarce does justice to the collection. It is in fact, as we have considered it, a series of medical essays, and as such ought to have a place in the library of every practitioner.

EXCISION OF THE SUPERIOR MAXILLA-BY BONE FOR OSTEO-SARCOMA.

THIS operation, which has hitherto been followed by fatal consequences, has been successfully performed in the Hospital at Lyons, by M. Gensoul, Chirurgien-en-chef. A professional gentleman who visited the cabinet of M. G., which is peculiarly rich in specimens of diseased structures, says:—

Among others, he produced a specimen of osteo-sarcoma of the maxilla superior of the left side, which he had extirpated some months previously, together with the greater portion of the maxilla. The method pursued was, to use his own expression, "chiseling" out the disease; and I was astonished to hear him say, it was completed with scarcely any hemorrhage, no vessels requiring ligature after the superficial branches divided by the first incisions were secured. The mass excised was of considerable thickness, and contained six teeth, the farthest incisor and five beyond. The patient recovered without anything remarkable occurring, and M. Gensoul exhibited a drawing taken when he left the hospital, in which, though the scar presented rather a formidable appearance, the deformity in outline was not very considerable. He did not expect any return of the disease.

M. G. also mentioned a second case of the same kind, which he had

operated on since the former, and with an equally favorable result. The tumor was smaller, and had not been preserved. This patient, however, had but just left the hospital.

Ligature on the Aorta.—We understand that the operation of applying a ligature on the aorta has been very recently performed at the Exeter Hospital, by that able and intelligent surgeon, Mr. James, for an aneurism of the external iliac artery, situated very high up. A ligature was, in the first instance, placed on the distal side of the aneurismal sac, on the femoral artery; which measure having failed to produce the desired effect, and symptoms of the most urgent description having supervened, the aorta was secured after the manner adopted by Sir A. Cooper. The patient survived the operation but a very few hours.

Prov. Med. Gazette.

Quicksilver in Constipation.—A severe case has been recently published in a London Journal, in which a stricture of the rectum proved fatal, after many potent remedies had been administered without the least benefit. Calomel, colocynth, and croton oil failed to force the barrier, and half a pound of quicksilver was given two days before the patient's death.

On examining the intestinal canal, the rectum was found to be of the enormous length of three feet, and so much contracted, about six inches above the sacrum, as scarcely to admit the tip of the finger. Above the stricture the bowel was greatly distended with fæces, and part of the quicksilver was lodged in the sigmoid flexure of the colon.

Close Imitation of Nature.—Dr. Abner Horton, of New-York city, has succeeded in forming an artificial eyelid for a black boy. This important operation was performed in a short time, and in a few days afterwards the boy had a very slightly eye, answering all the purposes of a natu-

ral one. The ball of the eye had been gored by an ox, and several attempts had been made to unite or restore the detached eyelid by other physicians, which all proved abortive.—*Daily Adv.*

Triple Dentition.—A gentleman in Portland, Maine, at the age of 75, years, had an entire new set of teeth, which he lived to exercise and enjoy as long as the first set. This gentleman, who is since deceased, was a relative of the Editor, who can vouch for the correctness of the statement.

A Dyspeptic.—There is now in the Hospital near York, Pennsylvania, a young woman, aged about 16 years, who weighs 364 pounds, and measures 4 feet 9 inches in height, and 4 feet 6 inches round the waist.

A black man, with a wooden leg, made application to the commissioners of the alms-house for assistance. "What do you do for a living?"—says one. "Why," said the black, "I opens oysters in season, and picks up a crumb." "And what else?" "Why I cleans boots when I can get any to clean." "Well, nothing else?" "Why yes, I sometimes *Doctors.*" "Ah, and can you cure the rheumatism?" "Yes sir," said Cuff, when it doesn't reach the marrow of the bone."

WE acknowledge the receipt of a treatise entitled, *Instructions and Observations concerning the use of the Chlorides of Soda and Lime*; by A. G. Labarraque. Translated by Jacob Porter.—Also, *A New Theory of Life*; by Dr. Baker, of Pennsylvania.

DIED.—In Providence, Dr. Harvey Robinson, æt. 42—In Warner, Dr. Henry Lyman, æt. 43—In Louisville, Ky. Dr. Joseph Buchanan, æt. 43—In Cornwall, Dr. Isaac Marsh, æt. 53—In Chillicothe, Dr. Edward Tiffin, æt. 64, formerly Governor of Ohio, and late Surveyor General of the United States.—In Keene, Dr. Josiah Goodhue, of Hadley, Mass. æt. 70—In New Orleans, Dr. Samuel Ellis, Surgeon Dentist—In Belfast, Dr. William Poor, æt. 63.

ADVERTISEMENTS.

A NATOMICO-SURGICAL DRAWINGS, and Descriptions of all the Surgical Operations, according to the most approved methods. By L. J. VON BIERKOWSKY. Translated from the German. In two volumes, and 570 drawings on 58 folio plates.

EXTRACTS FROM THE PROSPECTUS.

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A specimen of the translation, and the plates, is deposited for inspection at the Bookstore of CARTER & HENDEE, who receive subscriptions for the work.

Subscribers will be furnished with the work, and the first impressions of the plates, at the price of \$30.

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P. S. For the accommodation of subscribers the work will be issued in five Numbers, at \$6 each, payable on delivery. Sept. 29. 18202N1D.

BERKSHIRE MEDICAL INSTITUTION.

THE Annual Course of LECTURES will commence on the first Thursday in September, and continue fifteen weeks.

Theory and Practice of Physic by H. H. CHILDS, M.D. Anatomy and Physiology, J. D. WELLS, M.D.

Published weekly, by JOHN COTTON, at 184, Washington St. corner of Franklin St., to whom all communications must be addressed, *postpaid*.—Price three dollars per annum, if paid in advance, three dollars and a half if not paid within three months, and four dollars if not paid within the year. The postage for this is the same as for other newspapers.

Medical Jurisprudence, S. W. WILLIAMS, M.D.

Theoretical and Operative Surgery, S. WHITE, M.D. and S. P. WHITE, M.D. Materia Medica, Pharmacy and Obstetrics, C. B. COVENTRY, M.D. Chemistry, Botany, Mineralogy and Natural Philosophy, C. DEWY, M.D.

Matriculation ticket, \$3. Fee for Lectures, \$40. Library ticket, \$1. Graduation, \$15.50. Board, including washing, lodging and room, \$1.75 a week.

Pittsfield, July 22, 1829. aug4sept30

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HARVARD UNIVERSITY.

MEDICAL LECTURES.

THE MEDICAL LECTURES in Harvard University will begin in the Massachusetts Medical College, Mason-street, Boston, the third WEDNESDAY in October next, the 21st, at nine o'clock, A. M. Anatomy and Surgery, by Dr. WARREN. Chemistry, Dr. WEBSTER. Midwifery and Medical Jurisprudence, Dr. CHANNING. Materia Medica, Dr. BIGELOW. Theory and Practice of Physic, Dr. JACKSON.

Students attending the Medical Lectures are admitted, *without fee*, to the Surgical Operations and Clinical Practice of the Massachusetts General Hospital, during the course*.

Aug. 4. W. CHANNING, Dean.
eoptOct21.

ATREATISE on the Scrofulous Disease, by C.G. HUFELAND, Physician to the King of Prussia, &c., translated from the French of M. Bousquet, by Charles D. Meigs, M.D., is just received and for sale by CARTER & HENDEE.

Sept. 8.

newspaper